

Art Unit: 2829

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SD

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1. An inductively coupled direct contact test probe, comprising:
- a handgrip comprising an electrically conductive shield;
 - a measurement tip at a distal end of the handgrip, wherein the measurement tip is electrically isolated from the handgrip shield;
 - a sense line coupled to the measurement tip, wherein the sense line is inside of the handgrip and electrically isolated from the handgrip shield;
 - a toroid located at a proximal end of the handgrip, wherein a portion of the sense line forms a primary winding in electromagnetic communication with the toroid;
 - a first termination impedance, the first termination impedance being coupled in series with the sense line proximate to the toroid;
 - a plurality of turns of wire, wherein the plurality of turns of wire form a secondary winding in electromagnetic communication with the toroid;

a second termination impedance, the second termination impedance being coupled in series with the plurality of turns of wire;

a coaxial cable having a center conductor and an outer shield conductor encircling and shielding the center conductor, wherein the center conductor is coupled to the plurality of turns of wire; and

a shielded enclosure, wherein the shielded enclosure encloses the toroid, the portion of the sense line, the plurality of turns of wire, the first termination impedance and second termination impedance, whereby the shield of the handgrip, the shielded

enclosure and the outer shield conductor of the coaxial cable are connected together to form a substantially continuous electrical shield.

2. The inductively coupled direct contact test probe according to claim 1, wherein the measurement tip is adapted for connection to a circuit under test.

3. The inductively coupled direct contact test probe according to claim 1, wherein an external surface of the electrically conductive shield is electrically insulated.

4. The inductively coupled direct contact test probe according to claim 1, wherein the first termination impedance is a resistance having a value of about one megohm.

5. The inductively coupled direct contact test probe according to claim 1, wherein the second termination impedance is a resistance having a value of about fifty ohms.

6. The inductively coupled direct contact test probe according to claim 1, wherein the plurality of turns of wire are about ten turns of wire.

7. The inductively coupled direct contact test probe according to claim 1, further comprising a coaxial connector on an end of the coaxial cable, wherein the coaxial connector is adapted for connection to an input connector of measurement equipment.

8. The inductively coupled direct contact test probe according to claim 1, wherein the coaxial connector is selected from the group consisting of RCA, UHF, F, BNC, TNC, DIN, GR874, C, N, SMA, SMC and APC-7.

9. The inductively coupled direct contact test probe according to claim 7, wherein the measurement equipment is a spectrum analyzer.

10. The inductively coupled direct contact test probe according to claim 7, wherein the measurement equipment is an oscilloscope.

11. The inductively coupled direct contact test probe according to claim 1, wherein radio frequency signals are measured.

12. The inductively coupled direct contact test probe according to claim 1, wherein said test probe couples radio frequency signals into measurement equipment.

13. The inductively coupled direct contact test probe according to claim 1, wherein said test probe couples electromagnetic interference signals into measurement equipment.

14. The inductively coupled direct contact test probe according to claim 1, wherein the substantially continuous electrical shield is grounded.

15. The inductively coupled direct contact test probe according to claim 1, wherein an end of the coaxial cable couples the substantially continuous electrical shield to ground.

16. The inductively coupled direct contact test probe according to claim 1, wherein an unshielded portion of the measurement tip length is less than a wavelength of any signal measured.

17. The inductively coupled direct contact test probe according to claim 1, wherein the first termination impedance is of a larger impedance value than the second termination impedance.

18. The inductively coupled direct contact test probe according to claim 1, wherein the first termination impedance is substantially one megohm resistive.

19. The inductively coupled direct contact test probe according to claim 1, wherein the second termination impedance is substantially fifty ohms resistive.

20. The inductively coupled direct contact test probe according to claim 1, wherein the handgrip and the shielded enclosure are integral.

21. The inductively coupled direct contact test probe according to claim 1, wherein the handgrip and the shielded enclosure are separate.

CLAIMS 22 THROUGH 26 ARE CANCELLED